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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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7590

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EXAMINER

WILLIAMS, THOMAS J

ART UNIT

PAPER NUMBER

3683

DATE MAILED: 07/15/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/427,892

Applicant(s)

WEIFFEN ET AL.

Examiner

Thomas J. Williams

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 23 April 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-3, 5-7, 9 and 10 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3, 5-7 and 9 is/are rejected.
- 7) ☒ Claim(s) 10 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. Acknowledgment is made in the receipt of the amendment filed April 23, 2004.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1-3, 5, 6 and 9 are rejected under 35 U.S.C. 102(b) as being anticipated by US 4,971,180 to Kobayashi et al.

Re-claim 1, Kobayashi et al. discloses a vibration damper with a variable damping force (see figure 6), comprising:

a working cylinder 12;

a piston (interpreted as the combination of elements 14 and 92, this is consistent with the applicant's illustrated invention which illustrates two bodies that make up the piston unit), the piston is fastened to a piston rod 16, the piston unit divides the working cylinder into two working chambers 28 and 30;

first 36 and second 42 non-return valves are arranged in the piston portion 14, the non-return valves provide a damping force for the rebound and compression directions, the damping force of the first and second non-return valves generate a soft characteristic (since each valve is spring biased, this is consistent with the applicant's disclosure);

a damping valve 90 is arranged in piston portion 92, the damping valve comprises a valve body 94 and a valve seat that define a flow path therebetween (the valve seat is interpreted as the

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flat surface of piston portion 92 in opposed relationship to the base of the valve body), the damping valve has a variable damping action (see figure 6) and is arranged in series with each of the first and second non-return valves so that the variable damping action offsets the soft characteristic generated by the damping force provided by each of the first and second non-return valves, the damping valve is operatively arranged for providing a precontrolled damping force setting in at least one of the rebound and compression direction ("operatively arranged" merely requires that a particular condition can be met, in this situation the condition is a precontrolled damping force setting, the valve of Kobayashi et al. can be set by the solenoid to an open position which provides for a low damping force setting, as such the damping valve of Kobayashi et al. is interpreted by the examiner as being operatively arranged to provide a particular damping force setting),

wherein the damping valve arranged in series with the first and second non-return valve comprise a sole passage for the damping medium through the piston between the two working spaces (any damping medium passing through the piston must travel through one of either the first or second non-return valve and the damping valve) such that the damping medium is required to flow through the flow path of the damping valve in a first direction when damping medium is exchanged between the two working spaces in the rebound direction (i.e. the damping medium travels from space 30 to space 28 via the flow path of the damping valve and non-return valve 36) and the damping medium is required to flow through the flow path of the damping valve in a second direction when damping medium is exchanged between the two working spaces in the compression direction (i.e. the damping medium travels from space 28 to space 30

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via non-return valve 42 and the flow path of the damping valve), the second direction opposes the first direction.

Re-claim 2, the damping valve of Kobayashi et al. comprises an externally activated actuator for adjusting the variable damping action, see column 5 lines 45-49 and column 6 lines 14-19.

Re-claim 3, the first and second non-return valves are spring loaded valve disks.

Re-claim 5, Kobayashi et al. discloses an electromagnet, or solenoid, as the actuator for the damping valve.

Re-claim 6, the first and second non-return valves are accommodated together in the piston.

Re-claim 9, the first and second non-return valves communicate with the lower working space 28 and the damping valve actuates via the flow connection to the upper working space 30.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later

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invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

6. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kobayashi et al.

7. The first and second non-return valves are fixedly connected to the piston by element 44. However, Kobayashi et al. is silent as to if the non-return valves are preassembled as a modular unit. The examiner takes official notice that the non-return valves and associated seats are illustrated as a modular unit, and that by pre-assembling the non-return valves prior to insertion into the working cylinder would have resulting in an easier assembly process. It would have been obvious to one of ordinary skill in the art to have preassembled the non-return valves and associated valve seats prior to their insertion into the working chamber, thus reducing the need for assembly of the non-return valves and seats with the piston in a small space (such as inside the cylinder), which would result in an easier assembly process requiring less time.

Allowable Subject Matter

8. Claim 10 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Response to Arguments

9. Applicant's arguments filed April 23, 2004 have been fully considered but they are not persuasive. As stated in the above rejection, it is the opinion of the examiner that Kobayashi et al. is operatively arranged to provide a pre-controlled damping force setting. All that is required to meet this limitation set forth in claim 1 is to have the valve capable of being set or pre-

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controlled to at least one condition in which the fluid is allowed to flow through the piston. This condition is illustrated as curve B in figure 6 of Kobayashi et al., which is similar to the soft characteristic setting illustrated in figure 3a of the instant invention.

Conclusion

10. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

11. Any inquiries concerning this communication or earlier communications from the examiner should be directed to Thomas Williams whose telephone number is (703) 305-1346. The examiner can normally be reached on Monday-Thursday from 6:30 AM to 4:00 PM. The examiner can also be reached on alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jack Lavinder, can be reached at (703) 308-3421. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-1113.

TJW

July 12, 2004

THOMAS WILLIAMS
PATENT EXAMINER

Thomas Williams

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7-12-04